

CLAIMS

1. An application of a recombinant of adenovirus vector and human tumor suppressor p53 gene expression cassette for producing the medicine for treating
5 proliferative disease.

2. The application according to claim 1, wherein the adenovirus vector and human tumor suppressor p53 gene expression cassette of the recombinant is a specific sequence composed of promoter-p53cDNA-poly adenosine.

10 3. The application according to claim 2, wherein the upstream of the gene expression cassette is any eukaryotic cell promoters, prokaryotic cell promoters or virus promoters, and the downstream is any of the eukaryotic gene poly adenosine residues (Poly A tail).

15 4. The application according to claim 1, wherein the recombinant gene medicine is obtained in prokaryotic cells by homologous recombination, including:

20 1) the recombinant pGT-2 is obtained by homologous recombination of adenovirus and plasmid pGT-1 (containing two inverted terminal repeats on both ends of adenovirus) in prokaryotic cells;

25 2) the recombinant pGT-3 is obtained by homologous recombination of pGT-2 and artificial sequence "the right arm of adenovirus/ promoter-p53cDNA-poly A / the left arm of adenovirus " in prokaryotic cells;

30 3) The recombinant p53 adenovirus is obtained by discarding the prokaryotic sequence using endonuclease *PacI*.

5. The application according to claim 4, wherein the prokaryotic cell is *E. coli*.

30 6. The application according to claim 1, wherein the proliferative disease is any kind of scar.

35 7. The application according to claim 6, wherein the scar is pathological scar.

8. The application according to claim 7, wherein the pathological scar is cheloid.

40 9. The application according to claim 1, wherein the recombinant is used to produce injection solution.